

JOB DESCRIPTION
GS-8XX-11
INTERDISCIPLINARY ENGINEER

This position is identified as interdisciplinary, classifiable to any of the following titles and series, depending upon the qualifications of the incumbent:

A. General Engineer	GS-0801-11
B. Civil Engineer	GS-0810-11
C. Mechanical Engineer	GS-0830-11
D. Electrical Engineer	GS-0850-11
E. Environmental Engineer	GS-0819-11
F. Architect	GS-0808-11

MAJOR DUTIES

1. The incumbent will represent the ISO and will serve as the customer satisfaction advocate and overall USACE program coordinator for the installation, ensuring optimum integration of all ISO support, and other USACE support from labs, other districts, technical centers of expertise, and the Installation Support Center. Incumbent will be responsible for the coordination of the planning, development, design and maintenance and repair of projects. Tasks and works at the installation involving the regional area. The incumbent will act as liaison at the installation for project management issues with the directorate of Public Works (DPW) and the Area/Resident Engineer. Develops and coordinates functions relating to facilities of substantial complexity at major installations. Coordinates engineering and other technical and administrative matters between field project offices and higher levels in the organization. Initiates and coordinates measures to resolve major problems in order to obtain scheduled progress. Attends DPW staff meetings, and acts as advisor and advocate for the Corps of Engineers' services, projects, and programs. Acts as liaison at the installation for project management issues with the installation DPW and the area Resident Engineer. Provides technical support as appropriate and commensurate with education and experience. (45%)
2. Responsible for coordinating or monitoring planning and design work that is conventional as well as complex in nature, and which encompasses a number of components or phases of projects. Obtains required data and criteria, resolves problems, analyzes design costs, and prepares reports and correspondence. Assists the DPW in the development of project documentation including scopes of work, budget cost estimates, and environmental clearances for O&M, and environmental projects. Attends design coordination and review meetings. Reviews design documents for conformance to Installation Design Guides, Installation Master Plan, Installation SOPs, and Programming Documents (DD 1391s). Coordinates and prepares for environmental assessments. Provides advice and technical assistance on solid waste management and operations, stormwater management, and water conservation. (30%)
3. Monitors and coordinates projects undergoing maintenance and repair. Manages resolution of high visibility maintenance and repair problems involving both design and repairs. Coordinates design issues, i.e. RFIs, submittal reviews, etc. Monitors repair progress, funding, and the status of all project modifications and user requested changes. Coordinates pre-final and final inspections and monitors completion of deficiency lists.

Coordinates warranty inspections, and monitors resolutions of warranty issues. Assists in the turnover of O&M manuals, spare parts, extended warranty documentation and as-built drawings and preparation of DD Form 1354. (25%)

Performs other duties as assigned.

Factor 1. Knowledge Required by the Position -**Level 1-7 - 1250 Points**

Professional knowledge of engineering/architectural concepts, principles, and procedures applicable to the full range of engineering duties concerned with the design of systems, buildings and facilities constructed on military installations. Familiarity with related engineering fields, knowledge of criteria, intent of plans, and specifications, and waiver requirements sufficient to monitor contractor's proposals. Ability to analyze all related alleged design deficiencies resulting in modifications to contracts, formulate technical solutions, and recommend changes to Corps standard designs. These run the full range of those generated by either design to identify the most cost effective and functionally satisfactory solution to the problem within the guidelines of agency policy and technical criteria.

Factor 2 - Supervisory Controls**FLD 2-3 275 pts.**

Supervisor provides assignments in general terms of objectives, priorities, and anticipated problem areas. Independently plans and accomplishes work referring to the supervisor for advice, guidance and assistance on significant problems such as impasses or controversial or policy matters. Completed design work is subject to review for adequacy and compatibility with the work of other engineers. Calculations, findings, comments and recommendations are accepted as technically accurate, but may be checked or verified. Contract administration assignments are completed with considerable independence and are reviewed in terms of meeting objectives and conformance with agency Policies.

Factor 3. Guidelines -**Level 3 – 4 450 Points**

Guidelines used include all the standard technical material available to engineers/architects, agency policies and regulations, standard textbooks, manufacturer's catalogs and handbooks and guide specifications developed by the agency's central engineering staff, as well as various specialized technical publications. The employee is frequently confronted with problems for which these guidelines are inadequate or sometimes non-existent, requiring the employee to exercise judgement and resourcefulness in modifying and extending traditional criteria as may relate to critical risk-cost factors, latent conditions developing at advanced repairs.

Factor 4. Complexity**Level 4-4 225 Points**

The assignments are diverse and range to complex involving individual problem resolution and subsequent modifications subject to converting a number of essentially different systems and equipment utilized in Army buildings and facilities. This involves development of new design and adaptation of existing designs to suit changed conditions for complex systems and equipment, each presenting a different or new problem not adequately covered by guidelines for resolution. Must work with Congressional imposed funding restraints. Additionally, systems may require imposition of specialized requirements to provide a strictly controlled interior environment, such as for hospitals, automatic data processing centers, electronic repair facilities, and command and/or communication centers. The work requires considerable coordination with related engineering fields. Solutions must satisfy rigid restraints of ongoing contracts with regards to timeliness, effectiveness, and availability of contingency funds. Procurement methods used include one-step, conventional, expedited conventional, requalified, select list conventional, competitive negotiation and sole source negotiations. This requires knowledge and interpretation of the laws and re-evaluations concerning procurement and funding. Also procedures must be developed for almost all procurement types except conventional to meet specific project requirements.

Factor 5. Scope and Effect -**Level 5-4 225 Points**

The purpose of the work is to coordinate and integrate all elements of the project to assure schedules meet execution goals, design costs are within targets, repair costs are minimized and that all activities related to design quality are performed. Work has a significant impact on usability, maintainability, operation costs, and energy consumption of facilities built by the District on Military installations. Further, unique problem solutions are shared for use by other ISOs requesting assistance. The work especially contributes to effective maintenance and repair by providing timely solutions to existing problems occurring during the repair phase.

Factor 6. Personal Contact -**Level 6-3 60 Points**

Contacts are with officials, managers and other engineers within agency, technical and management personnel of the using activity, engineers of private Architect-Engineer consultants, equipment manufacturers and suppliers, and contractors.

Factor 7. Purpose of Contacts -**Level 7-3 120 Points**

Contacts are to exchange or obtain information, coordinate and establish project objectives, and resolve problems. Contracts often require the employee to influence or persuade HQ and/ or agency engineers and managers to adopt technical view points and approaches about which there are disagreements.

Factor 9, Physical Demands-**Level 9-1 5 Points**

Occasional physical activity is required for on-site data gathering, during field surveys and inspection.

Factor 9. Work Environment -**Level 9-1 5 Points**

Work is performed primarily in an office setting, although there are occasional visits to project sites, Architect-Engineer offices, etc.

TOTAL POINTS 2615